




Name: key

Date: _____

CHAPTER 6 REVIEW SHEET

Polygons

POLYGONS:

1. What is a polygon? closed figure w/ 3 or more sides.
2. Give an example of a concave pentagon. 
3. Give an example of a convex heptagon. 
4. a. What is the sum of all the exterior angles of any polygon?
 360°
b. How many degrees are there in one exterior angle of a regular octagon?
 $\frac{360}{8} = 45^\circ$
5. a. How many interior degrees are in a 36-gon?
 $180(n-2) = 180(36-2) = 180(34) = 6120^\circ$
b. How many degrees are in each angle of a regular 36-gon?
 $\frac{(36-2)180}{36} = \frac{6120}{36} = 170^\circ$
6. a. What is a regular polygon?
 \cong sides & \cong angles
b. Draw a regular quadrilateral. 
- c. What is another name for a regular quadrilateral?
square

QUADRILATERALS:

7. a. What are the three types of quadrilaterals?
Kite, trapezoids, parallelograms
b. Define each of the quadrilaterals you listed above.

↓

2 pairs
 \cong sides

↓

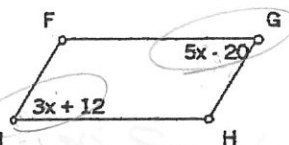
1 pair
 \parallel sides

↓

2 pair
 \parallel sides
8. Explain how a trapezoid and a parallelogram are similar and how they are different.
Quadrilaterals; 1 pair & 2 pair \parallel sides
9. Define each of the three special types of parallelograms.
Rhombus, Rectangle & Square

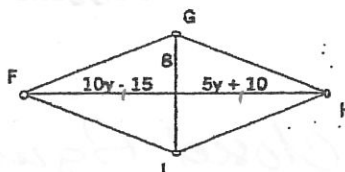
For problems 10–12, assume FGHI is a parallelogram.

10. Solve for x .



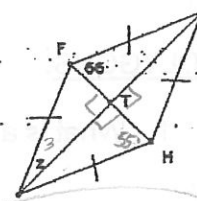
$$\begin{aligned} 3x + 12 &= 5x - 20 \\ 32 &= 2x \\ 16 &= x \end{aligned}$$

11. Solve for y .



$$\begin{aligned} 10y - 15 &= 5y + 10 \\ 5y &= 25 \\ y &= 5 \end{aligned}$$

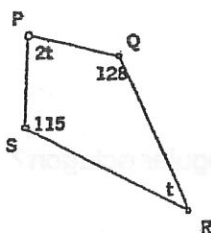
12. Solve for z .



$$z = 35^\circ$$

$$\begin{array}{r} 90 \\ - 55 \\ \hline 35 \end{array}$$

13. Solve for t .



Circle the true statements. If the statement is false, correct it.

14. All squares are rectangles. True

15. All rhombuses are squares. False

16. All squares are parallelograms. True

17. All rectangles are quadrilaterals. True

18. All parallelograms have 4 congruent angles. False

19. Every single Rectangle, Rhombus, and Square is a parallelogram.

- The opposite is NOT true!

20. A trapezoid and a kite can never be a parallelogram.

STUDY YOUR PROPERTIES OF EACH FIGURE!